

***NATIONAL WEATHER SERVICE ALASKA REGION SUPPLEMENT 06-2002
APPLICABLE TO NWSI 10-513
JANUARY 13, 2004***

***Operations and Services
Public Weather Services, NWSPD 10-5
WFO Winter Weather Products Specification, NWSI 10-513
ALASKA WFO WINTER WEATHER PRODUCTS SPECIFICATION***

NOTICE: This publication is available at: <http://www.nws.noaa.gov/directives/>.

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Certified by: W/AR1 (J. Partain)

Type of Issuance: Routine.

SUMMARY OF REVISIONS: This supplement supercedes National Weather Service Supplement 06-2002, “Alaska WFO Winter Weather Products Specification,” dated January 8, 2003, filed with NWSI 10-513.

- 1) Updated the Winter Storm Outlook example in Appendix B (Special Weather Statement) to a segmented format.
- 2) Included an exception to the “Order of Segments” instructions for Winter Weather Warnings (Section 5.3.4.2c).
- 3) Removed instructions regarding headline format. National procedures in NWSI 10-513 are to be followed.
- 4) Added wind chill advisory and warning criteria to Appendix A. This element was moved from WFO Non-Precipitation Products (NWSI 10-515) to WFO Winter Weather Products (NWSI 10-513).
- 5) Included a specification for a “Freezing Rain Warning” for northern Alaska.
- 6) Updated examples in Appendix B to reflect new zone names and to include the NWS attribution line, where applicable.

The section numbers in this supplement refer to the section numbers in NWSI 10-513.

<u>Signed by James Partain for</u>	<u>1/12/04</u>
Laura K. Furgione	Date
Acting Regional Director	

WFO Winter Weather Products Specification

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3. Winter Storm Outlook (product category SPS).

3.2 Issuance Guidelines.

3.2.2 Issuance Criteria. WFOs should issue Winter Storm Outlooks when conditions are favorable for a major winter storm to develop over part or all of the forecast area in the three to five day forecast period, or beyond the point normally covered by a watch. Winter Storm Outlooks are issued when there is a **60 percent or greater** chance of a hazardous winter weather event exceeding the local criteria.

4. Winter Storm Watches (product category WSW).

4.2 Issuance Guidelines.

4.2.2 Issuance Criteria. WFOs will issue a Winter Storm Watch when conditions are favorable for a hazardous winter weather event to develop over part or all of the forecast area, but the occurrence is uncertain. WFOs should issue Winter Storm Watches for the second, third, or occasionally fourth forecast periods, when there is a **60 percent or greater** chance of a hazardous winter weather event meeting or exceeding local warning criteria.

5. Winter Weather Warnings (product category WSW).

5.2 Issuance Guidelines. The WFO Shift Supervisor may authorize a WSO in the WFO's service area to issue warning and advisory products for selected zones. All warning and advisory statements prepared by the WSO must be coordinated with and agreed to by the Shift Supervisor before they are disseminated. The coordination and concurrence should be documented in the duty logs and/or warning checklists at the WFO and WSO.

The WSO staff should contact the area WFO Shift Supervisor when, in the opinion of the WSO staff, warning or advisory conditions are likely and there is no warning or advisory in effect or being coordinated by the area WFO. Reports of event approaching or achieving warning or advisory thresholds in or near the WSO service area are useful as evidence. The WFO should coordinate with the WSO and resolve any proposed WSO actions within 15 minutes of the initiated contact or as soon as completion of other higher priority actions permits.

There may be occasions at a WSO when the coordination and concurrence cannot be accomplished in a timely enough manner to support the protection of life and property. In this case, the WSO should issue the warning product and accomplish the coordination and concurrence as soon as contact can be made with the WFO Shift Supervisor.

5.2.2.1 Winter Weather Warning Products. WFOs and WSOs in Alaska should issue the winter weather warning products listed in NWSI 10-513.

Special instructions for freezing rain: Occasionally, significant rainfall occurs during the cold season in northern Alaska when the land is extremely cold soaked. Under these conditions, rain freezes on contact with ground surfaces and severely impacts transportation and commerce. To clearly convey information to our partners and customers, the terminology FREEZING RAIN WARNING may be used in lieu of ICE STORM WARNING in product headlines and warning text under these circumstances. Instructions and criteria for issuing Freezing Rain Warnings should be documented in the WFO Station Duty Manual.

5.3 Technical Description.

5.3.4.2 Segmented Forecast Information.

c. Order of Segments. Winter weather warnings are placed second in the order of segments. This order was designed to place the most important and/or time sensitive information near the beginning of the message. The order of segments is:

- (1) Cancellation
- (2) Warnings**
- (3) Advisories
- (4) Watches

Exception: If a new warning is being issued with very little lead time, generally 3 hours

or less, the warning should be placed at the beginning of the message ahead of cancellations.

6. Winter Weather Advisories (product category WSW).

6.2 Issuance Guidelines. WFOs will issue advisories based upon regionally and locally defined criteria by headlining the Zone Forecast Product (ZFP).

To supplement the information provided in the ZFP headline, WFOs may issue winter weather advisory products. These products are used to elaborate on the timing and intensity of hazardous weather events, and they should be issued for events that are expected to affect transportation and commerce or will otherwise impact the public in such a way that additional forecast or call-to-action information is needed to support public safety. Advisory products are particularly useful for early or late season events and for events that are climatologically unusual or infrequent. WFO Management should determine which, if any, criteria (e.g., freezing rain with an ice accumulation of .10 inch or greater) should require the issuance of an advisory product in their area of responsibility, and this information should be documented in the Station Duty Manual.

The WFO Shift Supervisor may authorize a WSO in the WFO's service area to issue advisory products for selected zones. For more information, see Section 5.2 above.

APPENDIX A - Zone Specific Winter Weather Advisory and Warning Criteria

Zones (WFO)	Advisory Threshold	Warning Threshold
Blowing Snow		Blizzard
All Zones	Sustained wind or frequent gusts greater than or equal to 25 mph accompanied blowing snow (with or without falling snow), occasionally reducing visibility to 1/4 mile or less for 3 hours or more.	Sustained wind or frequent gusts greater than or equal to 35 mph accompanied by falling and/or blowing snow, frequently reducing visibility to less than 1/4 mile for 3 hours or more.
Freezing Rain		Ice Storm (Note special instructions in Section 5.2.2.1)
017-029 (Juneau) 101-195 (Anchorage)	Light ice accumulation (freezing rain and/or freezing drizzle) less than 1/4 inch.	Ice accumulation of 1/4 inch or greater.
201-226 (Fairbanks)	Light ice accumulation (freezing rain and/or freezing drizzle) less than 0.10 inch.	Ice accumulation of 0.10 inch or greater.
Sleet		Heavy Sleet
All Zones	Sleet accumulation of 1 inch or more, but less than 2 inches in 6 hours	Sleet accumulation of 2 inches or more in 6 hours
Snow		Heavy Snow
017-026 (Juneau)	4–5 inches in 12 hours	6 inches in 12 hours or 12 inches in 24 hours
027-028 (Juneau)	3–5 inches in 12 hours	6 inches in 12 hours or 12 inches in 24 hours
029 (Juneau)	8– 11 inches in 12 hours	12 inches in 24 hours
101, 111, 121, 125, 135, 141, 145, 151, 155, 161, 171, 181, 185, 191, 195 (Anchorage)	6–11 inches in 12 hours or 12–23 inches in 24 hours	12 inches in 12 hours or 24 inches in 24 hours
131 (Anchorage)	None	24 inches in 12 hours
201-214 (Fairbanks)	None	6 inches in 24 hours

215-226 (Fairbanks)	4–5 inches in 12 hours	6 inches in 24 hours
Zones (WFO)	Advisory Threshold	Warning Threshold
Winter Weather		Winter Storm
All Zones	Winter weather event having more than one predominant hazard meeting or exceeding locally defined 12 and/or 24 hour advisory criteria for at least one of the precipitation elements, but remaining below warning criteria.	Winter weather event having more than one predominant hazard meeting or exceeding locally defined 12 and/or 24 hour warning criteria for at least one of the precipitation elements.
Wind Chill		Wind Chill
017-029 (Juneau)	-30°F with 15 mph sustained winds for 3 hours or more	-55°F with 15 mph sustained winds for 3 hours or more
101-195 (Anchorage)	-40°F with 15 mph sustained winds for 3 hours or more	-60°F with 15 mph sustained winds for 3 hours or more
201-206 (Fairbanks)	-50°F with 15 mph sustained winds for 3 hours or more	-65°F with 15 mph sustained winds for 3 hours or more
207-221+223-226 (Fairbanks)	-40°F with 15 mph sustained winds for 3 hours or more	-60°F with 15 mph sustained winds for 3 hours or more
222 (Fairbanks)	-40°F with 15 mph sustained winds for 3 hours or more	-50°F with 15 mph sustained winds for 3 hours or more

Table A-1 – Winter weather advisory and warning thresholds for Alaska zones.

APPENDIX B - Examples of NWS Alaska Winter Weather Products

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1. Description. The examples shown in this Appendix are consistent with the national format policies for watches, warnings, and statements.

2. Winter Storm Outlook.

WWAK83 PAFG 061356
SPSAFG

WINTER STORM OUTLOOK
NATIONAL WEATHER SERVICE FAIRBANKS AK
600 AM ADT SUN OCT 6 2002

AKZ207>210-216>218-070200-
CHUKCHI SEA COAST-LOWER KOBUK AND NOATAK VALLEYS-UPPER KOBUK AND
NOATAK VALLEYS-BALDWIN PENINSULA AND SELAWIK VALLEY-NORTHERN AND
INTERIOR SEWARD PENINSULA-LOWER KOYUKUK AND MIDDLE YUKON VALLEYS-
SOUTHEASTERN BROOKS RANGE-
INCLUDING...POINT HOPE...SHISHMAREF...KIVALINA...ESPENBERG...
NOATAK... KIANA...RED DOG MINE...AMBLER...SHUNGNAG...KOBUK...
KOTZEBUE...SELAWIK...NOORVIK...BUCKLAND...DEERING...CANDLE...
COUNCIL...HAYCOCK...PILGRIM SPRINGS...SERPENTINE HOT SPRINGS
...TAYLOR...GALENA...NULATO...HUSLIA... KALTAG...RUBY...KOYUKUK
...ARCTIC VILLAGE...WISEMAN...COLDFOOT...CHANDALAR D.O.T. CAMP
...INIAKUK LAKE
600 AM ADT SUN OCT 6 2002

...THE FIRST MAJOR WINTER STORM OF THE SEASON IS EXPECTED TO IMPACT
THE WESTERN INTERIOR AND NORTHWESTERN COAST BY MIDWEEK...

A STRONG LOW PRESSURE SYSTEM IS EXPECTED TO DEVELOP OVER THE CHUKCHI
SEA LATE TUESDAY INTO WEDNESDAY. THIS SYSTEM COULD CAUSE BLIZZARD
CONDITIONS ACROSS THE NORTHWEST COAST AND HEAVY SNOW OVER PORTIONS
OF THE WESTERN INTERIOR ON WEDNESDAY.

PERSONS IN...OR PLANNING TRAVEL THROUGH...NORTHWESTERN ALASKA AND THE
WESTERN INTERIOR SHOULD BE AWARE OF THE POSSIBILITY OF HAZARDOUS

WINTER WEATHER CONDITIONS WEDNESDAY. PAY CLOSE ATTENTION TO THE LATEST WEATHER FORECAST INFORMATION AS THIS WINTER WEATHER SITUATION CONTINUES TO UNFOLD.

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JL OCT 02 (Optional)

3. Winter Storm Watch.

WWAK47 PAJK 092157
WSWAJK

URGENT - WINTER WEATHER MESSAGE
NATIONAL WEATHER SERVICE JUNEAU AK
100 PM AST SAT MAR 9 2002

...SOUTHERN PANHANDLE COULD SEE OVER A FOOT OF NEW SNOW BY MONDAY...

.A WARM FRONT MOVING INTO THE SOUTHERN PANHANDLE ON SUNDAY COMBINED WITH ARCTIC AIR FROM THE CANADIAN INTERIOR WILL LIKELY RESULT IN HEAVY SNOWFALL ACROSS THE SOUTHERN PANHANDLE.

AKZ027>029-100400-
DIXON ENTRANCE TO CAPE DECISION COASTAL AREA-SOUTHERN INNER CHANNELS-
MISTY FJORDS-
INCLUDING...CRAIG...KLAOCK...KETCHIKAN...METLAKATLA...HYDER
100 PM AST SAT MAR 9 2002

...WINTER STORM WATCH IS IN EFFECT FOR SUNDAY AND SUNDAY NIGHT...

THE NATIONAL WEATHER SERVICE IN JUNEAU HAS ISSUED A WINTER STORM WATCH. LOCALLY HEAVY SNOW IS EXPECTED IN THE SOUTHERN PANHANDLE SUNDAY AND SUNDAY NIGHT. 6 TO 12 INCHES OF SNOW COULD ACCUMULATE BY SUNDAY NIGHT IN THE SOUTHERN INNER CHANNELS AND ALONG THE SOUTHERN OUTER COAST... AND 12 TO 16 INCHES OF NEW SNOW IS EXPECTED IN THE HYDER AREA BY LATE SUNDAY.

A WATCH MEANS CONDITIONS ARE FAVORABLE FOR HAZARDOUS WINTER WEATHER TO DEVELOP IN AND CLOSE TO THE WATCH AREA. PEOPLE ARE ENCOURAGED TO CLOSELY MONITOR THIS WEATHER SITUATION. PREPARATIONS FOR THIS POTENTIALLY DANGEROUS WEATHER EVENT SHOULD BEGIN NOW.

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CM MAR 02 (Optional)

4. Blizzard Warning.

WWAK42 PAFC 282358
WSWALU
URGENT - WINTER WEATHER MESSAGE
NATIONAL WEATHER SERVICE ANCHORAGE AK
500 PM AST WED FEB 27 2002

AKZ181-280800-
ALASKA PENINSULA-
INCLUDING...COLD BAY...SAND POINT
500 PM AST WED FEB 27 2002

...BLIZZARD WARNING IN EFFECT THIS EVENING...

THE NATIONAL WEATHER SERVICE IN ANCHORAGE HAS ISSUED A BLIZZARD WARNING. NORTHWEST WINDS 30 MPH GUSTING TO 55 MPH WILL REDUCE VISIBILITY TO NEAR ZERO IN SNOW AND BLOWING SNOW THIS EVENING. CONDITIONS ARE EXPECTED TO IMPROVE BY MIDNIGHT AS WINDS DIMINISH TO WEST 15 TO 25 MPH.

A WARNING MEANS A SERIOUS THREAT TO LIFE AND PROPERTY IS OCCURRING OR IMMINENT. ALL TRAVEL OR OUTDOOR ACTIVITY IS STRONGLY DISCOURAGED.

THE NEXT STATEMENT IS SCHEDULED AT 1100 PM AST.

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ALBANESE FEB 02 (Optional)

5. Winter Storm Warning.

WWAK47 PAYA 090100
WSWYAK

URGENT - WINTER WEATHER MESSAGE
NATIONAL WEATHER SERVICE YAKUTAT AK
400 PM AST THU JAN 8 2004

AKZ017-091300-
CAPE FAIRWEATHER TO CAPE SUCKLING COASTAL AREA-
INCLUDING...YAKUTAT
400 PM AST THU JAN 8 2004

...WINTER STORM WARNING IN EFFECT TONIGHT...

THE NATIONAL WEATHER SERVICE IN YAKUTAT HAS ISSUED A HEAVY SNOW WARNING. HEAVY SNOW IS EXPECTED IN THE YAKUTAT AREA THIS EVENING WITH ACCUMULATIONS OF 8 TO 10 INCHES BY MIDNIGHT. SNOWFALL RATES WILL LIKELY BE 1 TO 2 INCHES PER HOUR LATE THIS EVENING. AFTER MIDNIGHT...THE HEAVY SNOW IS EXPECTED TO TURN INTO HEAVY SLEET FOR A FEW HOURS BEFORE CHANGING TO RAIN TOMORROW MORNING.

A WARNING MEANS A SERIOUS THREAT TO LIFE AND PROPERTY IS OCCURRING OR IMMINENT. MOTORISTS SHOULD USE EXTREME CAUTION DUE TO POTENTIALLY HAZARDOUS ROAD CONDITIONS. DAMAGE TO BUILDINGS...BOATS...AND OTHER STRUCTURES MAY RESULT FROM HEAVY SNOW LOADING IF SNOW IS NOT CLEARED PERIODICALLY.

6. Winter Weather Advisory.

WWAK47 PAJK 291556
WSWAJK

URGENT - WINTER WEATHER MESSAGE
NATIONAL WEATHER SERVICE JUNEAU AK
700 AM AST TUE JAN 29 2002

AKZ020-021-025-026-292200-
GLACIER BAY-EASTERN CHICHAGOF ISLAND-JUNEAU BOROUGH AND NORTHERN
ADMIRALTY ISLAND-INNER CHANNELS FROM KUPREANOF ISLAND TO ETOLIN ISLAND-
INCLUDING...GUSTAVUS...HOONAH...JUNEAU...PETERSBURG...WRANGELL...KAKE
700 AM AST TUE JAN 29 2002

...FREEZING RAIN ADVISORY IN EFFECT THROUGH THIS MORNING...

FREEZING DRIZZLE AND RAIN WILL CONTINUE TO PRODUCE SLIPPERY CONDITIONS

ON ROADS AND WALKWAYS IN THE COMMUNITIES OF GUSTAVUS...HOONAH...JUNEAU
... PETERSBURG...WRANGELL...AND KAKE THIS MORNING. THE FREEZING
PRECIPITATION SHOULD BECOME MIXED WITH RAIN AS THE TEMPERATURES WARM
INTO THE 30S THROUGH EARLY AFTERNOON.

AN ADVISORY MEANS A POTENTIALLY HAZARDOUS EVENT IS OCCURRING OR
IMMINENT. MOTORISTS SHOULD USE EXTREME CAUTION DUE TO POTENTIALLY
HAZARDOUS ROAD CONDITIONS.

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CM JAN 02 (Optional)

7. Combination of winter weather events.

WWAK42 PAFG 190059
WSWWCZ

URGENT- WINTER WEATHER MESSAGE
NATIONAL WEATHER SERVICE FAIRBANKS AK
400 PM AST WED DEC 18 2002

...A MAJOR WINTER STORM WILL IMPACT NORTHWEST ALASKA THURSDAY...

.THE STRONGEST STORM TO STRIKE NORTHWEST ALASKA IN THE PAST YEAR WILL
APPROACH THE BERING STRAIT THURSDAY. IT WILL GENERATE SNOW AND VERY
HIGH WINDS. BLIZZARD CONDITIONS AND COASTAL FLOODING ARE ALSO POSSIBLE.

AKZ207-213-190700-
CHUKCHI SEA COAST-ST LAWRENCE ISLAND+BERING STRAIT COAST-
INCLUDING...POINT HOPE...SHISHMAREF...KIVALINA...RED DOG PORT...
GAMBELL...SAVOONGA...BREVIG MISSION...TELLER...LITTLE DIOMEDE...
WALES
400 PM AST WED DEC 18 2002

...HIGH WIND WARNING IN EFFECT FOR THURSDAY THROUGH FRIDAY...

THE NATIONAL WEATHER SERVICE IN FAIRBANKS HAS ISSUED A HIGH WIND
WARNING. SOUTH WINDS TO 60 MPH WITH GUSTS TO 75 MPH ARE EXPECTED
IN THE BERING STRAIT THURSDAY AND FRIDAY. THE WIND WILL BE ACCOMPANIED
BY A DRIVING MIX OF RAIN AND SNOW.

A WARNING MEANS A SERIOUS THREAT TO LIFE AND PROPERTY IS
OCCURRING...IMMINENT... OR HIGHLY LIKELY. ACTION SHOULD BE TAKEN
WITHOUT DELAY TO PROTECT AND SECURE STRUCTURES. LOOSE OBJECTS THAT
MAY BE BLOWN AROUND OR DAMAGED IN THE WIND SHOULD BE BROUGHT INDOORS.

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AKZ201-208-211-190700-
WESTERN ARCTIC COAST-LOWER KOBUK AND NOATAK VALLEYS-SOUTHERN SEWARD
PENINSULA COAST-
INCLUDING...WAINWRIGHT...ATQASUK...POINT LAY...NOATAK...KIANA...RED DOG
MINE...NOME...WHITE MOUNTAIN...GOLOVIN
400 PM AST WED DEC 18 2002

...BLIZZARD WATCH IN EFFECT FOR THURSDAY...

THE NATIONAL WEATHER SERVICE IN FAIRBANKS HAS ISSUED A BLIZZARD WATCH.
STRONG SOUTHWEST WINDS OF 35 TO 50 MPH AND BLOWING SNOW ARE EXPECTED
TO REDUCE VISIBILITY BELOW ONE QUARTER MILE THURSDAY. LOW WIND CHILLS
WILL ACCOMPANY THE STORM ALONG WITH CONSIDERABLE FALLING AND DRIFTING
SNOW.

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A WATCH MEANS CONDITIONS ARE FAVORABLE FOR HAZARDOUS WINTER WEATHER TO DEVELOP IN AND CLOSE TO THE WATCH AREA. PEOPLE ARE ENCOURAGED TO CLOSELY MONITOR THIS WEATHER SITUATION. PREPARATIONS FOR THIS POTENTIALLY DANGEROUS WEATHER EVENT SHOULD BEGIN NOW. TRAVEL AND OUTDOOR ACTIVITY WILL BE VERY DANGEROUS ONCE THE STORM HITS.

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